



**Figure S4.** Triacylglycerol accumulation during prolonged-incubation in *f/2-NH<sub>4</sub>Cl* medium supplemented with or without sodium bicarbonate. *N. oceanica* cells were inoculated and incubated in *f/2-NH<sub>4</sub>Cl* medium (with or without NaHCO<sub>3</sub>) in ePBRs and sparged with air enriched to 5% CO<sub>2</sub> at 0.37 L min<sup>-1</sup> for 2 min per h. S1 to 8, day 1 to 8 after the cultures reached stationary phase. A, pH measurement from S5 to S8. B, Analysis of TAG content during prolonged incubation. The results are the average of three biological replicates and error bars indicate standard deviation. Asterisks indicate significant difference between CO<sub>2</sub> and CO<sub>2</sub> & NaHCO<sub>3</sub>. \*\*,  $P < 0.01$ ; \*,  $P < 0.05$ ; n=3.